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What is claimed is:

1. A recycling method for recycling a cake obtained by solidifying particles that are generated at a step of machining a crystal ingot to a wafer, or at a step of 5 machining a semiconductor wafer.
2. A recycling method according to claim 1, wherein said cake is obtained at a predetermined water content, without the occurrence of a chemical reaction.
3. A recycling method according to claim 1 or 2, 10 wherein said machining step is an abrading, grinding or polishing step.
4. A recycling method according to claim 1 or 2, wherein said step of machining said semiconductor wafer is a dicing, back grinding or wafer polishing step.
- 15 5. A recycling method according to one of claims 1 to 4, wherein said particles are Si flakes.
6. A recycling method for recycling, as a material to be melted or mixed, a cake that is obtained by solidifying particle generated at a step of machining a crystal ingot to 20 a wafer, or at a step of machining a semiconductor wafer.
7. A recycling method for employing as a material to be melted, a cake that is obtained by solidifying particle generated at a step of machining a crystal ingot to a wafer,

or at a step of machining a semiconductor wafer, and for recycling said cake as an ingot.

8. A recycling method for employing as a material to be melted, a cake that is obtained by solidifying, at a 5 predetermined water content, particles generated at a step of machining a crystal ingot to a wafer, or at a step of machining a semiconductor wafer, and for recycling said cake as an ingot.

9. A method for fabricating a semiconductor ingot 10 wherein a cake that is obtained by solidifying, at a predetermined water content and without a reaction with a chemical occurring, particles generated at a step of machining a crystal ingot to a wafer, or at a step of machining a semiconductor wafer, is employed as a material 15 to be melted.

10. A recycling method according to one of claims 6 to 8, wherein said machining step is an abrading, grinding or polishing, dicing, back grinding or wafer polishing step.

11. A method according to claim 9, wherein said 20 machining step is an abrading, grinding or polishing, dicing, back grinding or wafer polishing step.

12. A method for fabricating a semiconductor ingot comprising the steps of:

discharging, to a waste tank, not only water but also Si particle generated at a step of machining a crystal ingot to a wafer, or at a step of machining a semiconductor wafer;

5 adjusting waste water in said waste water tank to a predetermined density by using a filter device;

transferring said waste water having said predetermined density to collection means;

discharging said waste water under pressure;

10 using said collection means to generate a block that consists of said Si particle at a predetermined water content and that does not react with a chemical in said waste water tank; and

using said block consisting of said Si particle as a material to be melted for recycling.

15 13. A method according to claim 12, wherein water used at said machining step contains carbon dioxide gas.

14. A method according to any one of claims 12, wherein said machining step is an abrading, grinding or polishing, dicing, back grinding or wafer polishing step.

20 15. A method for fabricating a semiconductor ingot comprising the steps of:

discharging, to a waste tank, not only water but also Si particle generated at a step of machining a crystal ingot to a wafer, or at a step of machining a semiconductor wafer;

adjusting waste water in said waste water tank to a predetermined density by using a filter device wherein a solid composed of the same material as said Si particle is formed as a second filter on the surface of a first filter;

5 transferring said waste water having said predetermined density to collection means;

discharging said waste water under pressure;

using said collection means to generate a block that consists of said Si particle at a predetermined water 10 content and that does not react with a chemical in said waste water tank; and

using said block consisting of said Si particle as a material to be melted for recycling.

16. A method according to claim 15, wherein said solid 15 is particle dispersed in wastewater.

17. A method according to claim 15 or 16, wherein the surface layer of said second filter is refreshed.

18. A method according to claim 17, wherein, for the refreshment, air bubbles are passed through the surface of 20 said second filter.